

## **REMARKS**

Applicant thanks Examiner Kim for the courtesy of the interview of December 9, 2003. Amended claim 1 and new claims 50-92 are now pending. The amendment and the new claims closely reflect the understandings reached during the interview. The amendments and new claims present no new matter.

### **I. Priority**

On December 29, 2003, Applicant files a certified copy of foreign priority application FR 98/10338, filed August 12, 1998.

With regard to the Examiner's comments about the requirements of 37 CFR 1.63(c), Applicant notes that it filed a Supplemental Application Data Sheet (ADS) on May 8, 2003. The Supplemental ADS lists the foreign priority application in the field denoted Foreign Priority Information.

### **II. Claim Objections**

The Office Action objects to the separation of dependent claims by claims that depend from different claims. New claims 50-92 are not separated from the claims they depend from by claims that depend from different claims.

The Office Action objects to the term "wild-type gene" in (now cancelled) claim 24. None of the new claims contains this phrase.

The Office Action objects to the phrase "thanks to a marker" in (now cancelled) claim 33. New claim 84 recites "using a marker" rather than "thanks to a marker."

### **III. Claim Rejections -- Indefiniteness**

The Office Action purports that (now cancelled) claims 22 and 23 are indefinite because it is unclear to what enzyme the term "enzyme" refers. New claims 88-91 clarify the distinction between the ligase and the enzyme that recognizes and degrades nonhybridized ends of the fragments. New claims 88-91 refer to the latter as the "degrading enzyme."

The Office Action purports that the term “synthetic” in (now cancelled) claim 25 is indefinite because all polynucleotides are synthesized. New claim 69 contains the term “artificial” instead of synthetic. The term is meant to distinguish between polynucleotides produced by cloning sequences that exist in nature and polynucleotides produced by synthesizing sequences that have been designed by man.

The Office Action purports that the term “initiated oligonucleotides” in (now-cancelled) claim 30 is indefinite because it is unclear when oligonucleotides have been “initiated.” Applicant respectfully disagrees.<sup>1</sup> In any event, the issue is moot because none of the new claims contains the offending phrase.

The Office Action states that (now cancelled) claim 36 is indefinite because it refers to claim 1 twice and because the meaning of “one or several restricted banks” is unclear. New claim 71 refers to claim 1 a single time, and it recites “a restricted bank” rather than “one or several restricted banks.” “Restricted bank” is defined on page 14, lines 17–21 of the specification: “According to an advantageous embodiment of the process of the invention, the polynucleotide bank can thus result from a screening having made it possible to select by any appropriate means the polynucleotide sequences offering advantageous characteristics compared to the reference sequences. The sequences thus selected constitute a restricted bank.” The article “a” before “restricted bank” is intended to encompass both the singular and plural.

#### **IV. Claim Rejections - 35 USC 102**

The Office Action rejects claims 1-18, 20-36, 42-44 and 49 in view of Stemmer et al. Claims 2-36 and 42-49 are now cancelled. It was agreed during the interview that this rejection would be withdrawn in light of the amendments herein to claim 1.<sup>2</sup>

#### **V. Claim Rejections - 35 USC 103(a)**

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<sup>1</sup> As evident on pages 1-2 and 5, 11, 13 and 15-17 of the application, an initiator is a primer and an “initiated oligonucleotide” is merely an “oligonucleotide primer.”

<sup>2</sup> “The Stemmer rejection was agreed to be withdrawn in view of the proposed amendment.” Interview Summary, December 9, 2003.

The Office Action rejects (now cancelled) claims 15-48 as purportedly obvious over Stemmer in view of Rouwendal et al. It was agreed during the interview that this rejection would also be withdrawn in light of the amendments herein to claim 1.<sup>3</sup>

The Office Action also rejects (now cancelled) claim 19 as purportedly obvious over Stemmer in view of Gary et al. The Stemmer reference has been withdrawn in light of the amendments herein to claim 1. Furthermore, Gary has nothing to do with recombination of polynucleotides. Gary reports domain mapping experiments to pinpoint the PCNA-binding region of FEN-1 and to show that the small region responsible for activity is conserved in XPG. One of ordinary skill in the art would not have combined Gary with Stemmer and combining them would not have achieved the claimed invention.

For at least the foregoing reasons, Applicant respectfully requests withdrawal of all outstanding objections and rejections.

## **VI. Related Application**

Pursuant to the recent case *Dayco Products Inc. v. Total Containment Inc.*, 329 F.3d 1358 (Fed. Cir. 2003), patent applicants may have a duty to inform examiners about rejections in related applications that are handled by different examiners. As such, please note that there is an outstanding rejection in the parent application (09/723316) of the above-captioned application. The claims of the parent differ from the claims of the above-captioned application.<sup>4</sup>

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<sup>3</sup> "Rouwendal rejection was also agreed to be withdrawn in response to the same proposed claim amendment [as for Stemmer]." Interview Summary, December 9, 2003.

<sup>4</sup> Rejected claim 1 of the parent application is as follows:

"1. Process of obtaining in vitro recombined polynucleotide sequences starting from a library of polynucleotide sequences characterized in that it includes the following steps:  
a) the fragmenting of a library of double-stranded polynucleotide sequences,  
b) the denaturation of the fragments possibly in the presence of one or several assembling templates,  
c) the hybridization of said fragments with one or several assembling templates if it/they is/are not present in step (b),  
d) the ligation of said fragments in order to obtain recombined polynucleotide sequences,  
e) the selection of the recombined polynucleotide sequences having advantageous properties as compared to the corresponding properties of one or several reference sequences."

Furthermore, in view of a recent interview with the supervisory examiner of the parent, Applicant believes that a supplemental amendment will overcome the outstanding rejection therein.

Respectfully submitted,  
HUNTON & WILLIAMS

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By: 

Robert M. Schulman  
Registration No. 31,196  
Samson Vermont  
Registration No. 42,202

1900 K Street, NW, Suite 1200  
Washington, DC 20006  
(202) 955-1926—Telephone  
(202) 778-2201—Facsimile